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P932 : Poster and Demo

The Generation Challenge Programme (GCP) Platform For Crop Research

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The **Generation Challenge Programme** (GCP; www.generationcp.org) is a global crop research consortium directed toward crop improvement through the application of comparative biology and genetic resources characterization to plant breeding. A key consortium research activity is the development of a GCP crop bioinformatics platform to support GCP research. This platform includes the following:

- Shared, public platform-independent domain models, ontology, and data formats to enable interoperability of data and analysis flows within the platform.

- Web service and registry technologies to identify, share, and integrate information across diverse globally dispersed data sources, and to access high-performance computational facilities for computationally intensive, high-throughput analyses of project data.
- Platform-specific middleware reference implementations of the domain model integrating a suite of public (largely open-access/-source) databases and software tools into a workbench to facilitate biodiversity analysis, comparative analysis of crop genomic data, and plant breeding decision making.

Availability: see

<http://www.generationcp.org/bioinformatics>